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| 10/733,327 | 12/12/2003 | Udo Mircea Neustadter | TR-191-US | 9105 |
| 36630 7590 04/23/2009 VICTORIA DONNELLY PO BOX 24001 HAZELDEAN RPO KANATA, ON K2M 2C3 CANADA | | | | |
| EXAMINER | | | | |
| DAILEY, THOMAS J | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/733,327

Applicant(s)

NEUSTADTER ET AL.

Examiner

Thomas J. Dailey

Art Unit

2452

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-22 are pending.

Response to Arguments

2. The objections and 35 U.S.C. 112 rejections directed previously at the claims have been withdrawn in view of the entered claim amendments.
3. The 35 U.S.C. 101 rejections directed at claims 1-22 remain, although the rationale supporting these rejections has changed due to the amendments. These rejections have been elaborated on below.
4. The applicant argues with respect to the prior art rejection of claim 1 Doshi (US Pub. No. 2004/0193728) fails to disclose Vendor Attribute TLV fields on the LSA payload and a Vendor Attribute Link State ID field on the LSA header. Specifically contending Doshi reserves fields for vendor-specific extensions, but does not necessarily use them and therefore does not disclose the instant invention.
5. The examiner disagrees and that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of

the specification, limitations from the specification are not read into the claims.

See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

For example, claim 1 recites, "providing on the LSA header a single Vendor attribute Link State Identification field; and...providing on the LSA payload a set of Vendor Attribute Type/Length/Value (TLV) fields." The examiner contends that even assuming, *arguendo*, that Doshi only discloses the LSA payload with Vendor Attribute Type/Length/Value fields with reservations for vendor-specific extensions without any explicit "use" of said fields; Doshi still discloses these portions of the claimed invention. The claimed invention simply requires "providing" the LSA payload and the TLV fields and the reservation of fields (i.e. Doshi's disclosure) is analogous to the provisioning of fields.

6. The applicant further argues with respect to the prior art rejection of the claims that Doshi fails to disclose an Enterprise Code field including information identifying a vendor as provided in the amended claims (e.g. claim 1, lines 10-11).
7. These arguments have been considered but are moot in view of the new ground(s) of rejection.
8. The applicant argues with respect to claims 2 and 11 that Doshi fails to disclose Vendor Attribute Link State ID field.

9. The examiner disagrees. Doshi discloses the Vendor Attribute Link State ID field of the LSA header has a numerical value (Doshi, [0228], lines 1-2, a link state ID is essential to a LSA header).
10. The applicant argues with respect to claims 5 and 14 that Doshi fails to disclose the use of dither tones.
11. The examiner disagrees and notes the claims recite, "wavelength division multiplexing link information comprising **one or more or the following...**" That is Doshi need only disclose of the items in the list and those it does not necessarily need to disclose that said information is the frequencies of dither tones.
12. The applicant argues with respect to claims 6 and 15 that Doshi does not disclose anything related to vendor attributes data section.
13. The examiner disagrees and directs the applicant to the arguments presented above in response to claim 1's rejection.
14. The applicant argues with respect to claims 7 and 16 that Doshi fails to disclose to a text string bearing a node name.

15. The examiner disagrees. Doshi discloses a Node Name which includes a text string bearing the name of the node ([0228], lines 14-16, "advertising node" would include its name in any LSA and is a text string bearing the name of a node).

Claim Rejections - 35 USC § 101

16. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

17. Claims 1-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

18. Claims 1-20 are rejected under 35 U.S.C. 101 based on Supreme Court precedent and recent Federal Circuit decisions, a 35 U.S.C § 101 process must (1) be tied to a particular machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In re Bilski et al, 88 USPQ 2d 1385 CAFC (2008); Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780, 787-88 (1876).

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the particular machine to

which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Here, applicant's method steps are not tied to a particular machine and do not perform a transformation. Thus, the claims are non-statutory.

The mere recitation of the machine in the preamble with an absence of a machine in the body of the claim fails to make the claim statutory under 35 USC 101. *Note the Board of Patent Appeals Informative Opinion Ex parte Langemyer et al.*

19. Claim 21 recites, "A WDM optical network...comprising: a first network element."

As the claimed invention may be interpreted and implemented as software alone, when read in light of the specification, the invention is directed to functional descriptive material (e.g. software per se) that is not tangibly embodied on a computer system which is non-statutory.

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doshi et al (US Pub. No. 2004/0193728), hereafter "Doshi," in view of Chiba et al (US Pub. No. 2002/0080752, cited on previous PTO-892), hereafter "Chiba."
22. As to claim 1, Doshi discloses a method of extending an Open Shortest Path Found (OSPF) protocol used in a network having a plurality of nodes connected by optical links, the OSPF protocol having OSPF packet comprising an opaque Link State Advertisement (LSA) having an LSA header and a LSA payload ([0185]), the method comprising:
- providing on the LSA header a single Vendor-attribute Link State Identification (ID) field ([0228], lines 1-2, a link state ID is essential to the standard LSA header); and
 - providing on the LSA payload a set of Vendor Attribute Type/Length/Value (TLV) fields ([0228], lines 1-6), the Value field including an Enterprise Code field and a Vendor attribute-Data section ([0228], lines 6-11, vendor-specific extensions read on enterprise code and vendor attribute data), and the Type field being a Vendor attribute-Type field indicating the presence of the Enterprise Code field in the Value field ([0228], lines 15-23, Resource Flag reads on Vendor attribute-Type field, i.e. "All other fields defined are present conditional to the value of the Resource Flag field.");

the Vendor attribute Link State ID field of the LSA header indicating the presence of the set of Vendor Attribute TLV fields ([0228], lines 1-6, if the length field is non-zero this is an indication that their are TLV triplets).

But, Doshi does not explicitly disclose the Enterprise Code field includes information that identifies a vendor.

However, Chiba discloses, through the use of vendor-extensions, TLV fields which including a Vendor-ID (column 2, lines 42-52).

Therefore, it would have been obvious at the time of the invention to combine the teachings of Doshi and Chiba in order to provide a means to identify vendors in Doshi's system and thereby simplify its management.

23. As to claim 10, it is rejected by a similar rationale to that set forth in claim 1's rejection.

24. As to claim 19, Doshi discloses a method for distributing wavelength identification information for a WDM optical network using a known routing protocol ([0076] and [0077], lines 24-30), the method comprising:
providing a packet formatted according to the known routing protocol; and

inserting in said packet a Vendor attribute-type field, a Vendor-attribute-length field fields ([0228], lines 1-6), an Enterprise Code field and a Vendor attribute-data section ([0228], lines 6-11, vendor-specific extensions read on enterprise code and vendor attribute data), wherein the Vendor attribute-Data section includes a wavelength identification information to be distributed ([0076] and [0077], lines 24-30).

But, Doshi does not explicitly disclose the Enterprise Code field includes information that identifies a vendor.

However, Chiba discloses, through the use of vendor-extensions, TLV fields which including a Vendor-ID (column 2, lines 42-52).

Therefore, it would have been obvious at the time of the invention to combine the teachings of Doshi and Chiba in order to provide a means to identify vendors in Doshi's system and thereby simplify its management.

25. As to claim 21, it is rejected by a similar rationale to that set forth in claim 19's rejection.

26. As to claims 2 and 11, Doshi discloses the Vendor Attribute Link State ID field of the LSA header has a numerical value, which is designed not to conflict with the

numerical values of a Opaque Type and a Type-Specific ID fields of a standard LSA header ([0228], lines 1-11).

27. As to claims 3-4 and 12-13, Doshi discloses the numerical value of the Vendor attribute Link State ID field indicates the presence of Vendor specific link related information in the Vendor attribute-Data section of the set of Vendor Attribute TLV fields ([0228], lines 1-11).

28. As to claims 5 and 14, Doshi discloses the Vendor specific link related information is a wavelength division multiplexing (WDM) link related information comprising one or more of the following a wavelength identifier of the wavelength of the WDM link ([0077], lines 24-30 and [0045], lines 12-15 indicates the sharing information is distributed utilizing OSPF and therefore the LSA headers described in [0228]).

29. As to claims 6 and 15, Doshi discloses the Vendor attribute-Data section comprises a sub-TLV field, the sub-TLV field comprising a sub-sub set of Vendor Attribute TLV fields, which contains said Vendor specific link related information ([0228], lines 1-11).

30. As to claims 7 and 16, Doshi discloses the Vendor specific node related information comprises one or more of the following: a Node Name which includes

a text string bearing the name of the node ([0228], lines 14-16, "advertising node" would include its name in any LSA).

31. As to claims 8 and 17, Doshi discloses the Vendor attribute-Data section comprises a sub-TLV field, the sub-TLV field comprising a sub-sub set of Vendor Attribute TLV fields, which contains said Vendor specific node related information ([0228], lines 1-11).

32. As to claims 9 and 18, Doshi discloses the sub-TLV field comprises an Advertising Router ID field ([0228], lines 14-16, "advertising node" would include its name in any LSA).

33. As to claims 20 and 22, Doshi discloses the known routing protocol is the OSPF protocol ([0185]), and the packet includes a Link State Advertisement (LSA), comprising a set of Type/Length/Value (TLV) fields including said Vendor attribute-type, Vendor attribute-length, Enterprise Code fields, and the Vendor attribute-data section ([0228], lines 15-23).

Conclusion

34. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

35. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Dailey whose telephone number is 571-270-1246. The examiner can normally be reached on Monday thru Friday; 9:00am - 5:00pm.

37. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

38. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. J. D./
Examiner, Art Unit 2452

/Kenny S Lin/
Primary Examiner, Art Unit 2452